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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,070	02/15/2002	Nobuyasu Suzuki	SUZUKI28	8511

1444 7590 12/18/2003

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EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,070

Applicant(s)

SUZUKI ET AL.

Examiner

Joseph C Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7 and 8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Final Rejection

Applicant's arguments filed 11/10/03 have been fully considered but they are not persuasive for reasons detailed below.

The prior art rejections are maintained or modified as follows:

Claim 1, 2, 5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seto et al. ("Seto")(EP '438) in view of Sajoto et al. ("Sajoto") (US '865).

Seto teaches an apparatus (Fig. 5-12) for producing high-purity particles comprising a generation chamber (101), a classification chamber (102), a plurality of classification means (Fig. 12; para. 27, 95 et seq.), an equidistantly separated particle inflow pipe means (Fig. 5, near 102) and a collecting chamber (103) with an orifice that reduces a piping cross section (Fig. 8, near 401).

Seto also teaches a heater in the collecting chamber (Fig. 8, near 402).

Seto as set forth above thus teaches all that is claimed except for expressly teaching infrared radiation for a heating means. This feature, however, is well-known as one of various heating means used in the gas processing arts (Sajoto, col. 6, ln. 19-40). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Seto, which already contains a heater, with an infrared radiation heating means that is well known in the art.

Applicant's contention that the use of Sajoto in a combination is not obvious is not persuasive. In particular, it is not persuasive that Sajoto has an object and

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functional result that are different than the present invention. Here, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, Sajoto is simply used to demonstrate that the use of infrared radiation as a heating means is well known in the gas processing arts and Applicant does not seem to dispute this teaching. Thus, the combination of Seto and Sajoto is well known to one with skill in the art and anticipates the claimed features as it is implicit that said combination anticipates the functional features (i.e., object and result), such as making the particles spherical. Consequently, the claims stand rejected.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seto in view of Sajoto as applied to claims 1, 2, 5 and 7-8, further in view of Hohla et al. ("Hohla") (US '034) or Wieser et al. ("Wieser") (US '222).

Seto in view of Sajoto as set forth above teach all that is claimed except for expressly teaching a gas refining means for the ambient gas. This feature, however, is well-known in chambers using gas excitation with light beams. For instance, Hohla (Abstract) and Wieser (col. 8, ln. 30 et seq.) expressly teach gas refining means. Moreover, the refining means provide the common-sense benefit of allowing the laser to operate in an uncontaminated environment. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Seto in view of Sajoto as taught above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Here, the language "is equidistantly separated from every 90 degree into four divisions" (claim 8, ln. 5, 6) is non-sensical and thus renders the scope of the claim indefinite.

Election/Restrictions

Newly submitted claims 9-14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons. Here, the method is regarded as distinct from the claimed apparatus as a materially different apparatus can be used to practice the claimed process as, by Applicant's own admission, the newly submitted method claims only "generally parallel[] the apparatus". See MPEP 806.05(e).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 9-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Examiner has maintained the prior art rejections, statutory rejections and drawing objections as previously stated and as modified above. Applicant's amendment necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is **703-308-8342**. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

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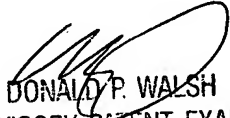
The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).

The **UnOfficial** fax phone number for the organization where this application or proceeding is assigned is **703-306-2571** or **703-308-6552**.

The examiner's **UNOFFICIAL Personal fax number** is **703-746-3678**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **703-308-1113**.

December 16, 2003


DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
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